

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KATSUJI IGARASHI, JUN YONEMITSU,
YOICHI YAGASAKI, YASUSHI FUJINAMI,
TOMOYUKI SATO, MOTOKI KATO,
and TERUHIKO SUZUKI

Appeal No. 1998-1322
Application No. 08/454,068

HEARD: May 16, 2000

Before BARRETT, RUGGIERO, and BARRY, Administrative Patent Judges.

BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the final rejection of claims 5, 11, 14, and 18. We reverse.

BACKGROUND

The invention at issue in this appeal relates to predictive encoding and decoding of a television picture. By

reducing temporal redundance between successive television pictures, predictive encoding avoids the need to transmit a picture in its entirety. More specifically, corrections are applied to a previously encoded picture to obtain a current picture. Frame-based motion compensation and field-based motion compensation are known types of predictive encoding.

In the invention, a television picture is treated as a mosaic of areas. Each area is predictively encoded using either frame-based motion compensation or field-based motion compensation, depending on which will produce the least amount of motion compensation data. Frame-based predictive encoding typically is used for areas that are stationary during a sequence of pictures. Field-based predictive encoding typically is used for areas exhibiting movement in the series of pictures. The type of orthogonal transformation is selected to match the type of predictive encoding. Such selection simplifies the construction of an encoder according to the invention.

Claim 5, which is representative for our purposes,
follows:

5. A picture signal decoding method comprising the steps of:

receiving an encoded signal including an encoded picture and a header indicating which of frame-based predictive encoding and field-based predictive encoding was used to encode said encoded picture, said encoded picture being encoded with the one of said frame-based predictive encoding and said field-based predictive encoding which produces the lesser amount of data;

frame-based predictively decoding said encoded picture when said header indicates that said encoded picture was encoded using frame-based predictive encoding; and

field-based predictively decoding said encoded picture when said header indicates that said encoded picture was encoded using field-based predictive encoding.

The reference relied on in rejecting the claims follows:

Krause et al.	5,091,782	Feb. 25,
1992.		
(Krause)		

Claims 5, 11, 14, and 18 stand rejected under 35 U.S.C. § 102(b) as anticipated by Krause. Rather than repeat the arguments of the appellants or examiner in toto, we refer the reader to the briefs and answers for the respective details thereof.

OPINION

In reaching our decision in this appeal, we considered the subject matter on appeal and the rejection advanced by the examiner. Furthermore, we duly considered the arguments and evidence of the appellants and examiner. After considering the totality of the record, we are persuaded that the examiner erred in rejecting claims 5, 11, 14, and 18. Accordingly, we reverse.

We begin by noting the following principles from Rowe v. Dror, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

A prior art reference anticipates a claim only if the reference discloses, either expressly or inherently, every limitation of the claim. See Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "[A]bsence from the reference of any claimed element negates anticipation." Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986)).

With these principles in mind, we consider the appellants' argument and the examiner's reply.

Regarding claims 5, 11, 14, and 18, the appellants argue, "The 'amount of data' as recited in applicants' claims is quite different from the 'amount of error' described by Krause." (Appeal Br. at 11-12.) The examiner replies, "the claims must be interpreted as broadly as their terms reasonably allow.... In the present case, it is reasonable to interpret the term 'data' as 'error'" (Examiner's Answer at 7.)

Claims 5 and 11 each specify in pertinent part the following limitation: "said encoded picture being encoded with the one of said frame-based predictive encoding and said field-based predictive encoding which produces the lesser amount of data" Similarly, claims 14 and 18 each specify in pertinent part the following limitation: "selecting the one of said frame-based predictive encoding and said field-based predictive encoding which corresponds to the lesser of said first and second amounts of data" In other words, the claims each recite selecting between frame-based predictive encoding and field-based predictive encoding based on which encoding produces a smaller quantity of data.

The examiner fails to show a disclosure of the claimed limitations in the prior art. Although Krause teaches selecting between frame-based predictive encoding and field-based predictive encoding, the selection is not based on which encoding produces a smaller quantity of data. To the contrary, the selection is based on which encoding is more accurate. Specifically, the reference includes the following passage.

[A]ccumulated errors from the respective frame and field formatted paths are compared at a comparator **122**, which provides an output signal at terminal **124** indicative of which path produced the least error for a particular pair of pixel data blocks.

The output signal from the error evaluation and selection components actuates switch **39** (FIG. 3) to connect the compression path having the least error to downstream processing circuitry. [Col. 8, ll. 49-57.]

By selecting between frame-based predictive encoding and field-based predictive encoding based on which encoding technique produces a smaller error, Krause bases selection on accuracy.

Selection based on the accuracy of data is not tantamount to selection based on the quantity of the data. We see no

inconsistency between this conclusion and the rule that the U.S. Patent and Trademark Office (PTO) should give claims their broadest reasonable interpretation during prosecution.

"The operative word is *reasonable*: the PTO has no such obligation regarding *unreasonable* interpretations."

Genentech, Inc. v. Wellcome Found. Ltd., 29 F.3d 1555, 1564 n.22, 31 USPQ2d 1161, 1168 n.22 (Fed. Cir. 1994).

Because Krause bases selection on the accuracy of data, we are not persuaded that the reference discloses the claimed limitation of "said encoded picture being encoded with the one of said frame-based predictive encoding and said field-based predictive encoding which produces the lesser amount of data" or the claimed limitation of "selecting the one of said frame-based predictive encoding and said field-based predictive encoding which corresponds to the lesser of said first and second amounts of data" The absence of this disclosure negates anticipation. Therefore, we reverse the rejection of claims 5, 11, 14, and 18 as anticipated by Krause.

CONCLUSION

To summarize, the rejection of claims 5, 11, 14, and 18
under 35 U.S.C. § 102(b) is reversed.

REVERSED

LEE E. BARRETT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOSEPH F. RUGGIERO)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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